FIG. 1

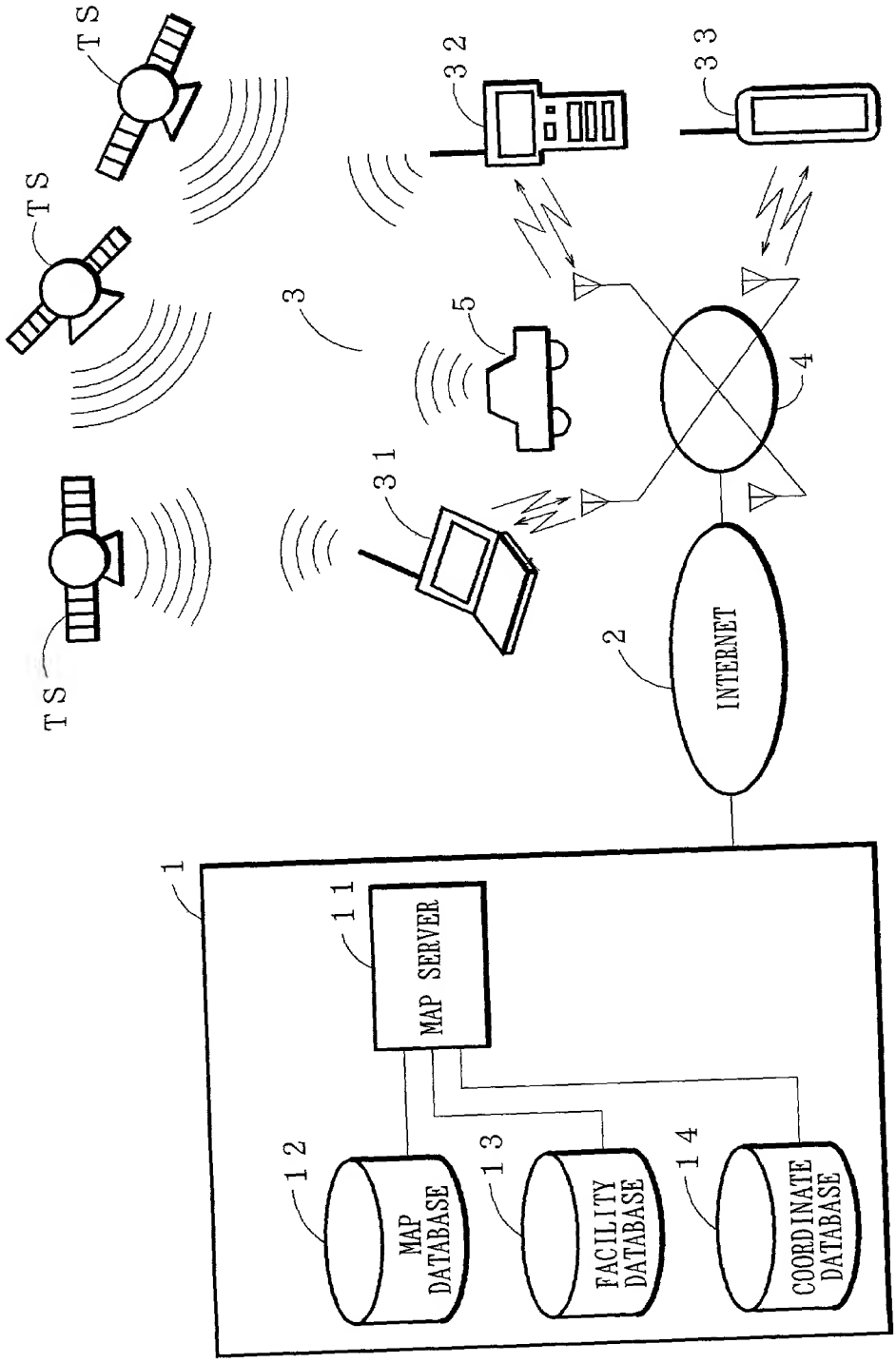

TS
TS
TS
TS
32
33
3
5
4
31
2
INTERNET
1
11
MAP SERVER
12
MAP DATABASE
13
FACILITY DATABASE
14
COORDINATE DATABASE

FIG. 2

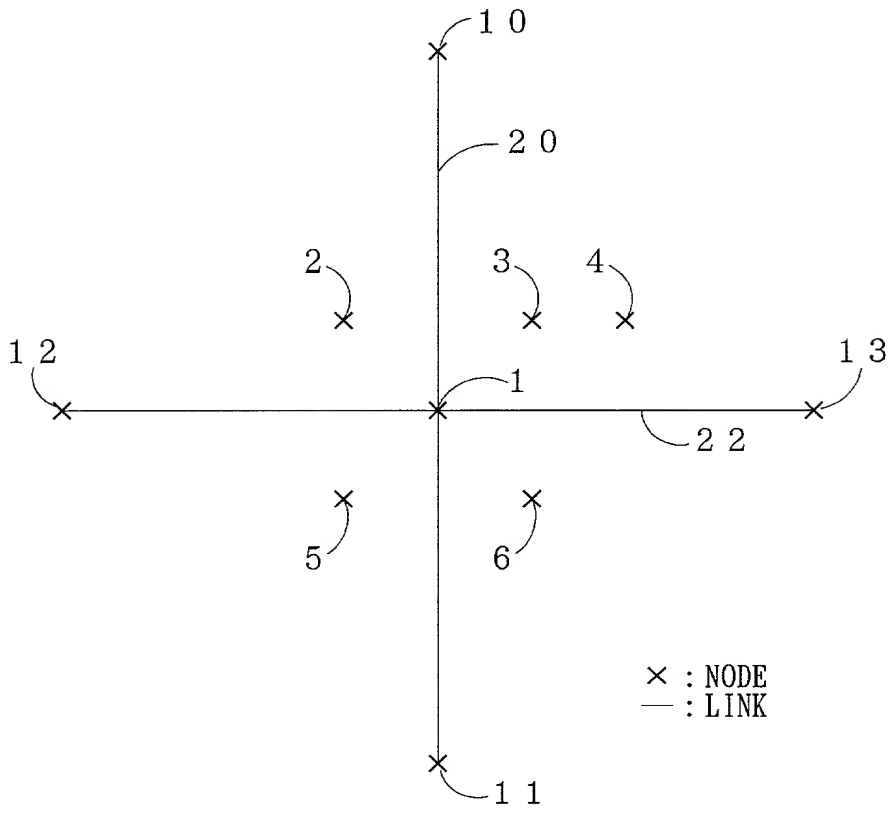
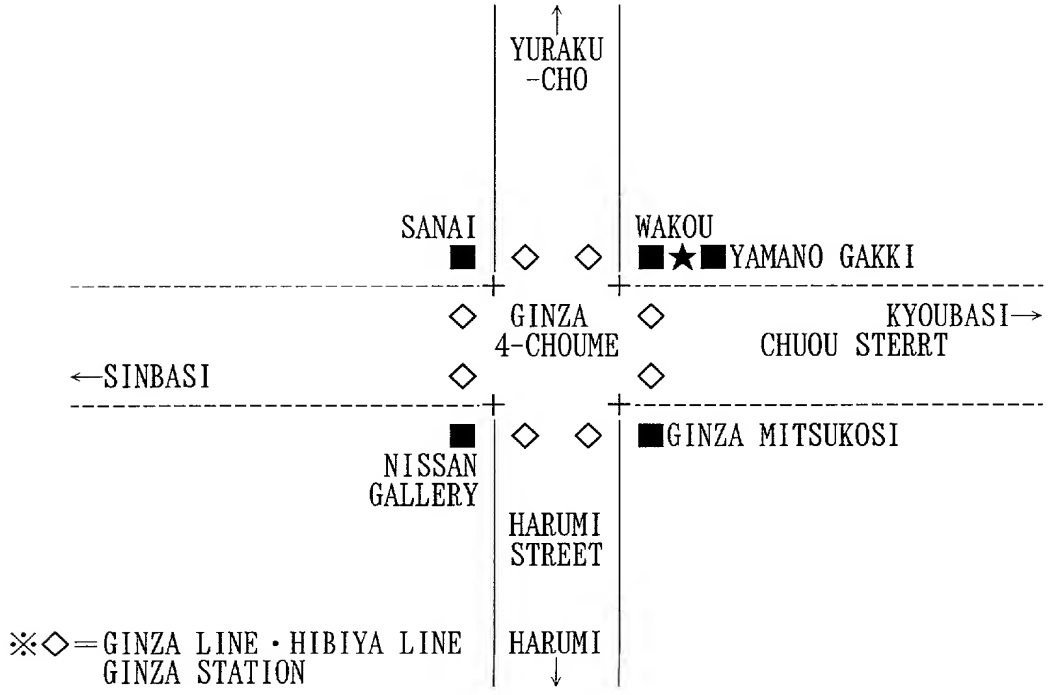

10
20
2
3
4
12
13
1
22
5
6
11
× : NODE
— : LINK

FIG. 3


YURAKU
-CHO
SANAI
WAKOU
YAMANO GAKKI
GINZA
4-CHOUME
KYOUBASI→
CHUOU STERRT
←SINBASI
GINZA MITSUKOSI
NISSAN
GALLERY
HARUMI
STREET
※◇=GINZA LINE・HIBIYA LINE
GINZA STATION
HARUMI

JP2001266006A1

FIG. 4A

NODE TABLE

NODE NO.	LATITUDE	LONGITUDE
1	x 1	y 1
2	x 2	y 2
3	x 3	y 3
4	x 4	y 4
5	x 5	y 5
6	x 6	y 6
10	x 10	y 10
11	x 11	y 11
12	x 12	y 12
13	x 13	y 13

FIG. 4B

LINK TABLE

LINK POSITION INFORMATION			ATTRIBUTE		
LINK NO.	STARTING POINT	ENDING POINT	LENGTH	NUMBER OF LANES	ONE-WAY TRAFFIC
20	10	11	15. 3	3	—
22	12	13	20. 4	3	—

FIG. 5A

OBJECT INFORMATION TABLE

NAME	GENRE	LATITUDE	LONGITUDE	ADDRESS	TEL
SANAI	STORE	x 2	y 2	○○○	×××
WAKOU	STORE	x 3	y 3	○○○	×××
YAMANO GAKKI		x 4	y 4	○○○	×××
NISSAN GALLERY		x 5	y 5	○○○	×××
GINZA MITSUKOSI		x 6	y 6	○○○	×××

FIG. 5B

AREA NAME TABLE

AREA NAME	NODE NO.	RINK NO.
CHUOU STREET	2、3、4、…	22
SINBASI	12	
KYOUBASI	13	
GINZA 4-CHOUME	1	
HARUMI	11	
HARUMI STREET	1	20

FIG. 6A

TEXT CONVERSION TABLE

FORM	TEXT (SYMBOL)
STREET (HORIZONTAL)	—
STREET (VERTICAL)	|
STREET (OBLIQUE)	/
STREET (OBLIQUE)	
INTERSECTION	+
INTERSECTION (OBLIQUE)	×
BUILDING	■
STATION I/O	◇

FIG. 6B

TEXT MAP DATA

X-COORDINATES	Y-COORDINATES	TEXT SYMBOL
X50	Y2	|
X50	Y3	|
X45	Y45	■
X55	Y45	■
X47	Y43	+

TO3020 "80066860

FIG. 7

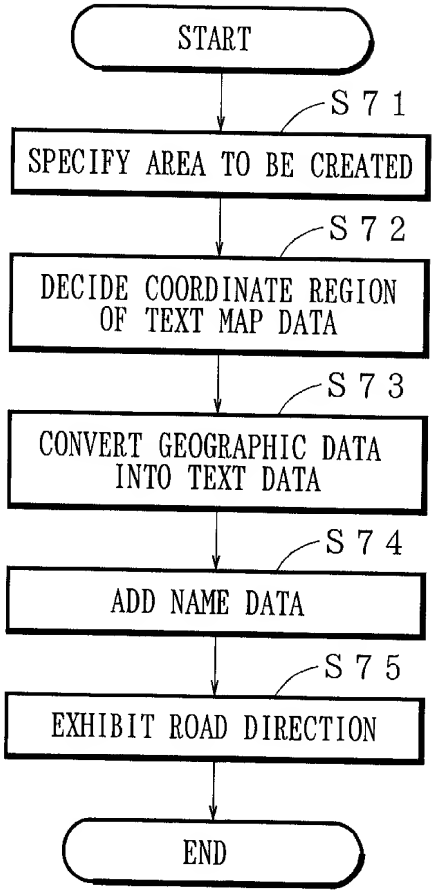
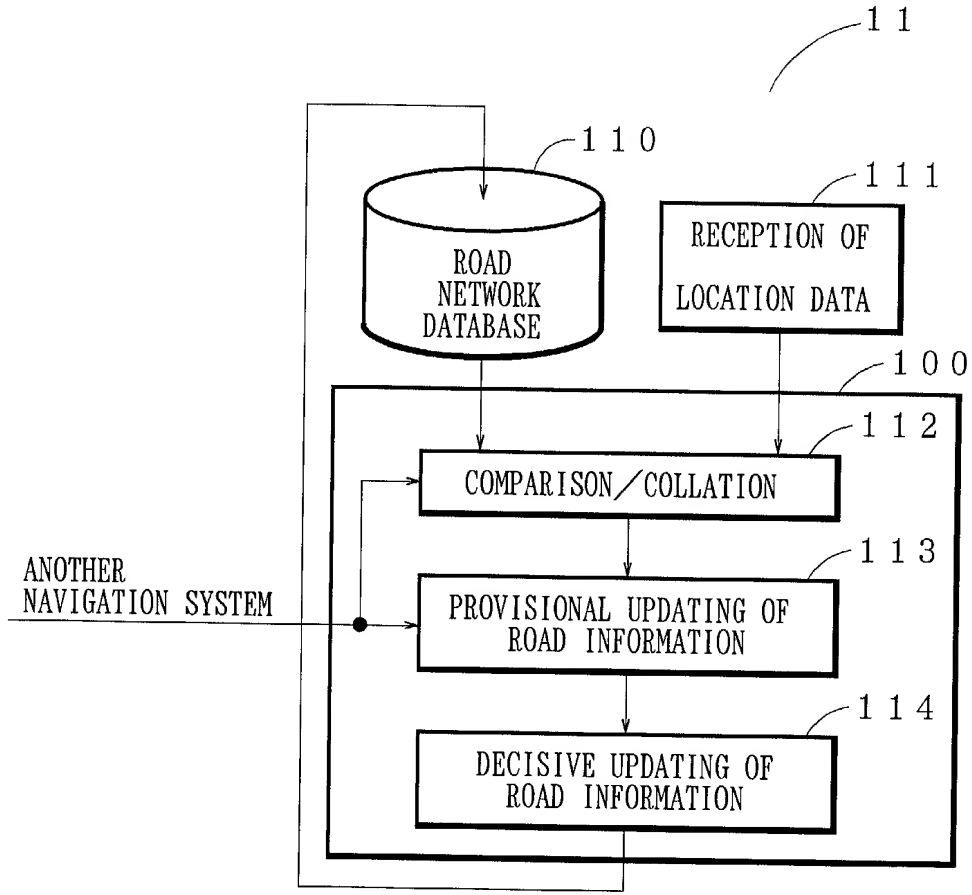


FIG. 8



NAKANO
SERVER, METHOD AND PROGRAM FOR UPDATING ROAD INFORMATION IN MAP INFORMATION PROVIDING SYSTEM, AND RECORDING MEDIUM WITH PROGRAM RECORDED
Filed July 6, 2001
Darryl Mexic
202-293-7060
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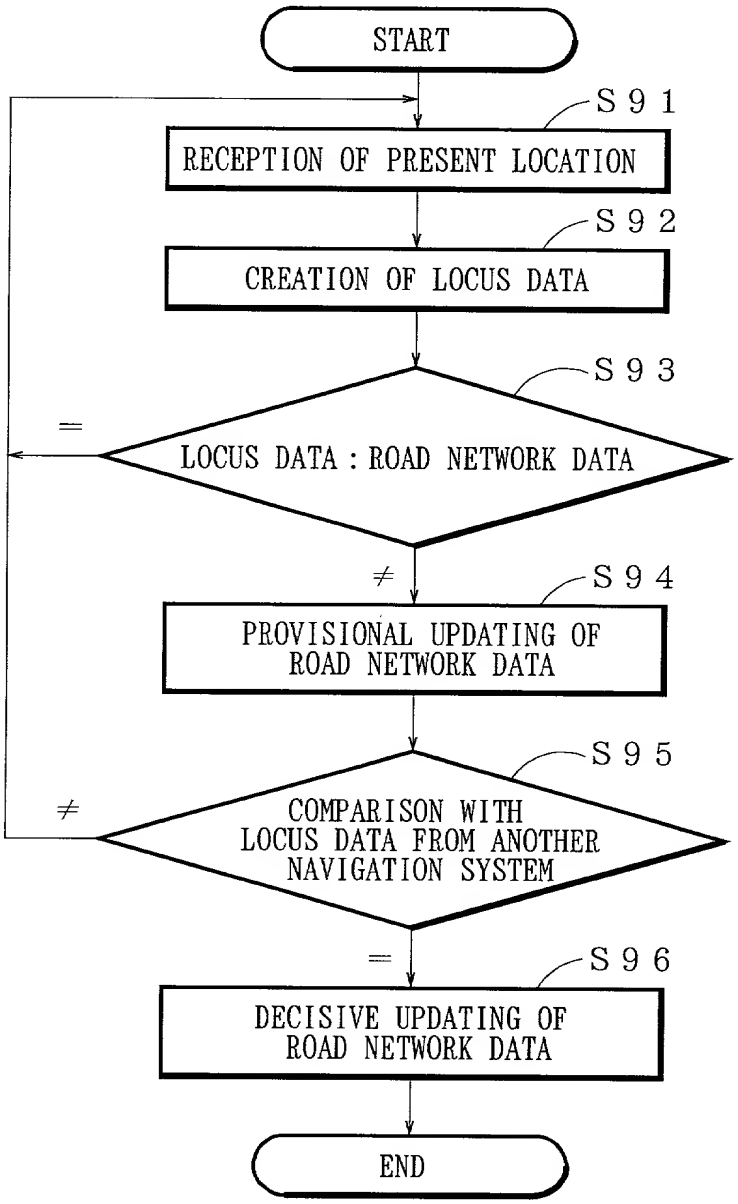
Q65341

FIG. 9


START
S91
RECEPTION OF PRESENT LOCATION
S92
CREATION OF LOCUS DATA
S93
LOCUS DATA : ROAD NETWORK DATA
=
≠
S94
PROVISIONAL UPDATING OF ROAD NETWORK DATA
S95
COMPARISON WITH LOCUS DATA FROM ANOTHER NAVIGATION SYSTEM
≠
=
S96
DECISIVE UPDATING OF ROAD NETWORK DATA
END